

Remarks

Claims 1 and 2 are being cancelled in favor of the other claims in the application to expedite the prosecution of the application.

Claims 5 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Terada (U.S. 6,456,041) in view of Kendall (U.S. 5,619,417). Applicants believe that claims 5 and 6 clearly are distinguishable patentably from the '041 patent, taken alone or in combination with the '417 patent. Claims 5 and 6 are dependent claims based on parent claims 3 and 4, respectively.

Claim 3 defines a method for obtaining a power limit modification that will prevent battery discharge voltage from exceeding the battery discharge set point. The circuit drawing that is relevant to the method of claim 3 is illustrated in Figure 4a. Claim 4 is distinguishable essentially for the same reasons claim 3 is distinguishable except that the method of claim 4 sets forth the method steps for computing the voltage proportional term and obtaining a power limit modification to prevent battery charge from exceeding a battery charge set point.

The method of claims 5 and 6 includes the step of measuring an error between the battery voltage set point and the actual battery voltage in a closed loop voltage feedback technique that is neither described nor suggested in the '041 patent, taken alone or in combination with the '417 patent.

The '417 patent is cited merely to demonstrate that it is known to use a low pass filter with a time constant that can be varied based on noise filters whereby high frequency electrical noise from a base driver amplifier can be filtered in an electronic circuit that is unrelated to Applicants' closed loop power control system. The battery monitoring system of the '417 patent has no relationship to Applicants' system wherein a power limit modification is obtained to correct charge and discharge power limits for a battery. Merely adding a filtering technique to the features of the '041 patent obviously would not be relevant in determining patentability since the '041 patent does not disclose a battery power limit modification technique, as set forth in Applicants' claims 3 and 4, which are the parent claims for rejected claims 5 and 6. The '041 patent merely discloses a system and method for

learning the actual capacity of a chargeable battery when the battery is performing a so-called refreshment discharge. There is no disclosure nor suggestion for determining an error between the battery voltage set point and the actual battery voltage using the actual voltage in a closed loop voltage feedback control technique. The teaching of the '417 patent cannot supply any deficiencies of the '041 patent in a patentability analysis of Applicants' claims 5 and 6.

Applicants reduced their invention to practice prior to the filing date of the '867 patent publication. Applicants also constructively reduced their invention to practice by filing their patent application, identified above, on July 30, 2004. Further, Applicants were diligent on reducing their invention to practice from a date prior to October 14, 2003 to July 30, 2004.

Claims 3-4, 7-9, 11-14 and 16-19 are rejected as being unpatentable over the patent publication of Cawthorne (U.S. 2005/0077867). Applicants are submitting with this paper a Declaration under Rule 131 to establish an effective invention date prior to the filing date of the '867 patent publication, which is October 14, 2003. In view of the Declaration under Rule 131, it is respectfully requested that the '867 patent publication be withdrawn as an effective reference to support the rejection of claims 3-4, 7-9, 11-14 and 16-19.

The Declaration under Rule 131 demonstrates that the invention was actually reduced to practice and successfully tested a powertrain incorporating the invention on June 7, 2002. It demonstrates also that Applicants diligently tested a powertrain incorporating the invention for production release on October 23, 2003, on January 14, 2004 and March 15, 2005.

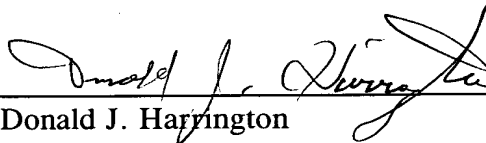
Claim 10 is rejected as being unpatentable over the '867 patent publication in view of the '041 patent. The '041 patent is not relevant to Applicants' closed loop power control system for the reasons previously stated. In view of this and in view of the Declaration under Rule 131 that accompanies this Amendment, it is requested the rejection of claim 10 in paragraph 6 on page 8 of the Office Action be withdrawn.

Claim 15 is rejected as being unpatentable over the '867 publication in view of the reference patent to Joko et al. (U.S. 5,939,861). Claim 15, which is based on claim 3 previously discussed, recites the step of clipping a measured actual battery current to values less than or equal to zero. The '861 patent describes a so-called clipping function using a switching circuit that bypasses current if over-charging of the battery is about to occur. This

does not have significance, however, in view of the attached Declaration under Rule 131, which effectively removes the '867 patent publication from consideration as a reference in a patentability determination.

A favorable consideration of the claims now remaining in the application is respectfully requested.

Respectfully submitted,
RYAN McGEE, et al.

By 
Donald J. Harrington
Reg. No. 17,427
Attorney/Agent for Applicant

Date: August 1, 2006

BROOKS KUSHMAN P.C.
1000 Town Center, 22nd Floor
Southfield, MI 48075-1238
Phone: 248-358-4400
Fax: 248-358-3351